

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P455952

Luminaire Tested: **GALN-SA7A-830-U-T2R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P455952  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA7A-830-U-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25796 lumens  
Efficiency: N/A  
Efficacy: 120.0 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

Input Watts (W): 215  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

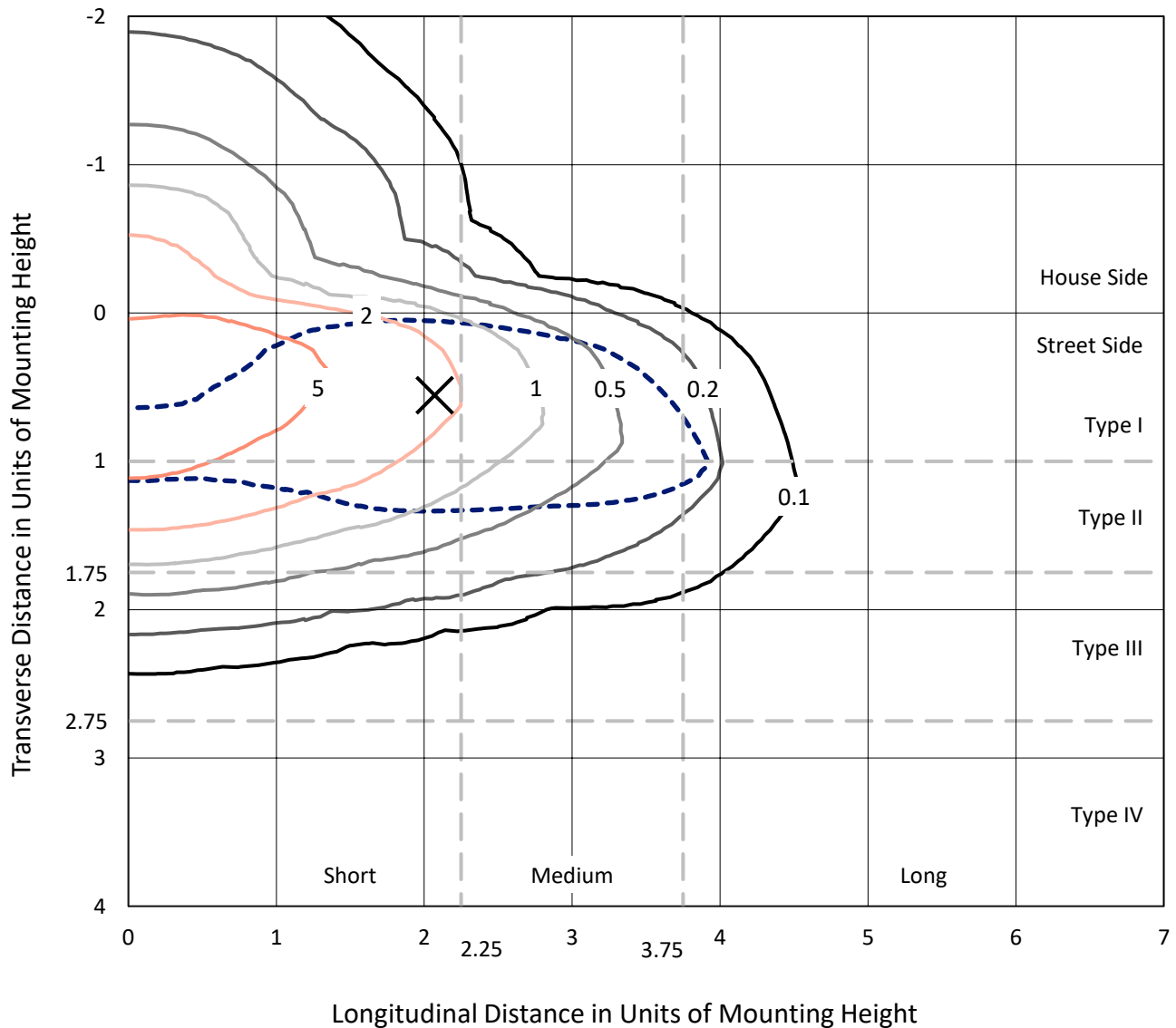


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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

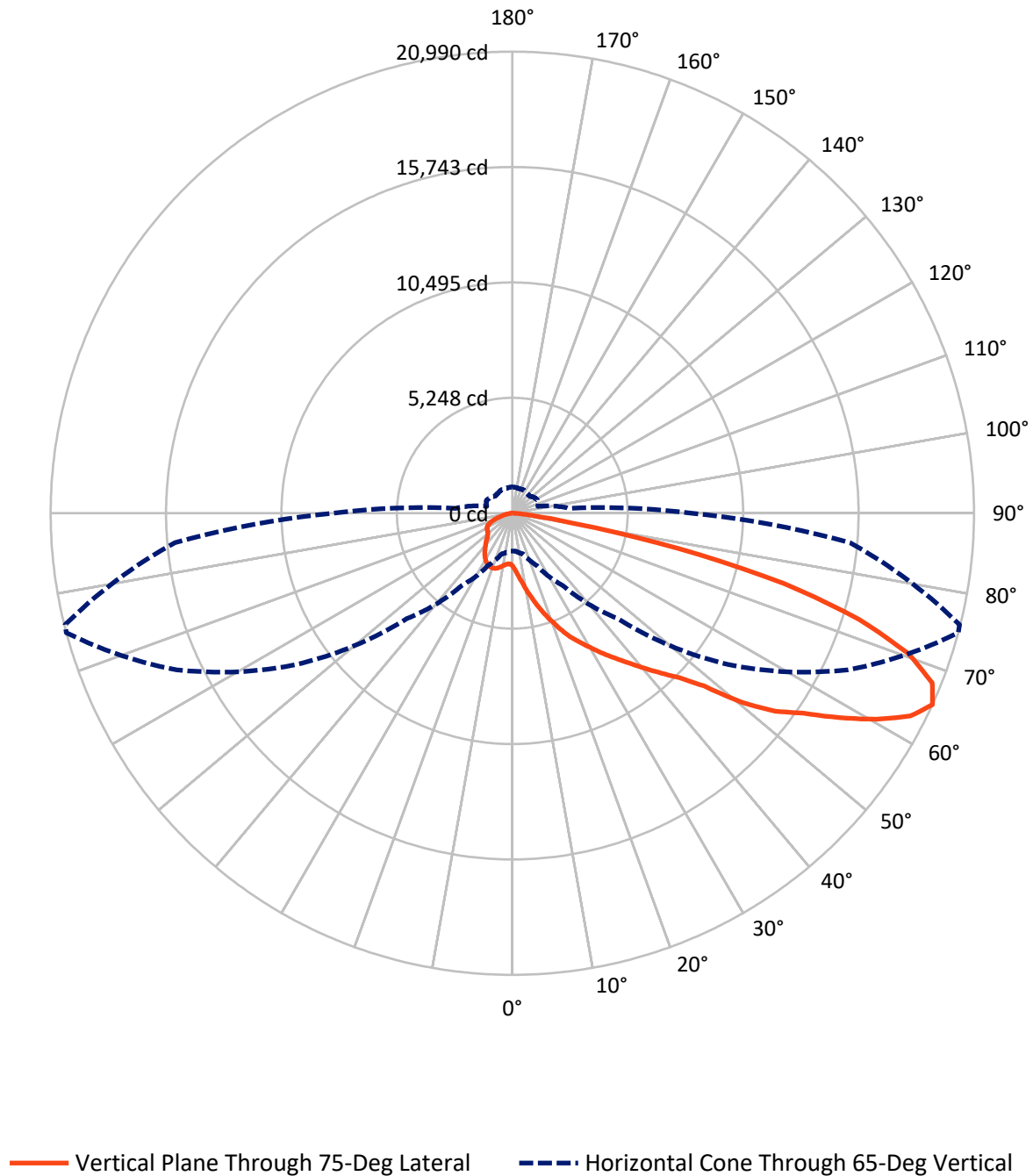


Based on 25 foot mounting height. Maximum calculated value = 10 fc  
 Type II - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4336.6   | 0.0    | 4336.6  |
|                    | % Fixture | 16.8     | 0.0    | 16.8    |
| <b>Street Side</b> | Lumens    | 21459.4  | 0.0    | 21459.4 |
|                    | % Fixture | 83.2     | 0.0    | 83.2    |
| <b>Total</b>       | Lumens    | 25796.0  | 0.0    | 25796.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 291.2   | 1.1       |
| 10°-20°   | 1140.6  | 4.4       |
| 20°-30°   | 2203.2  | 8.5       |
| 30°-40°   | 3578.7  | 13.9      |
| 40°-50°   | 4922.9  | 19.1      |
| 50°-60°   | 5812.2  | 22.5      |
| 60°-70°   | 5092.5  | 19.7      |
| 70°-80°   | 2431.2  | 9.4       |
| 80°-90°   | 323.5   | 1.3       |
| 90°-100°  | 0.0     | 0.0       |
| 100°-110° | 0.0     | 0.0       |
| 110°-120° | 0.0     | 0.0       |
| 120°-130° | 0.0     | 0.0       |
| 130°-140° | 0.0     | 0.0       |
| 140°-150° | 0.0     | 0.0       |
| 150°-160° | 0.0     | 0.0       |
| 160°-170° | 0.0     | 0.0       |
| 170°-180° | 0.0     | 0.0       |
| 0°-90°    | 25796.0 | 100.0     |
| 0°-180°   | 25796.0 | 100.0     |

**Coefficient of Utilization**



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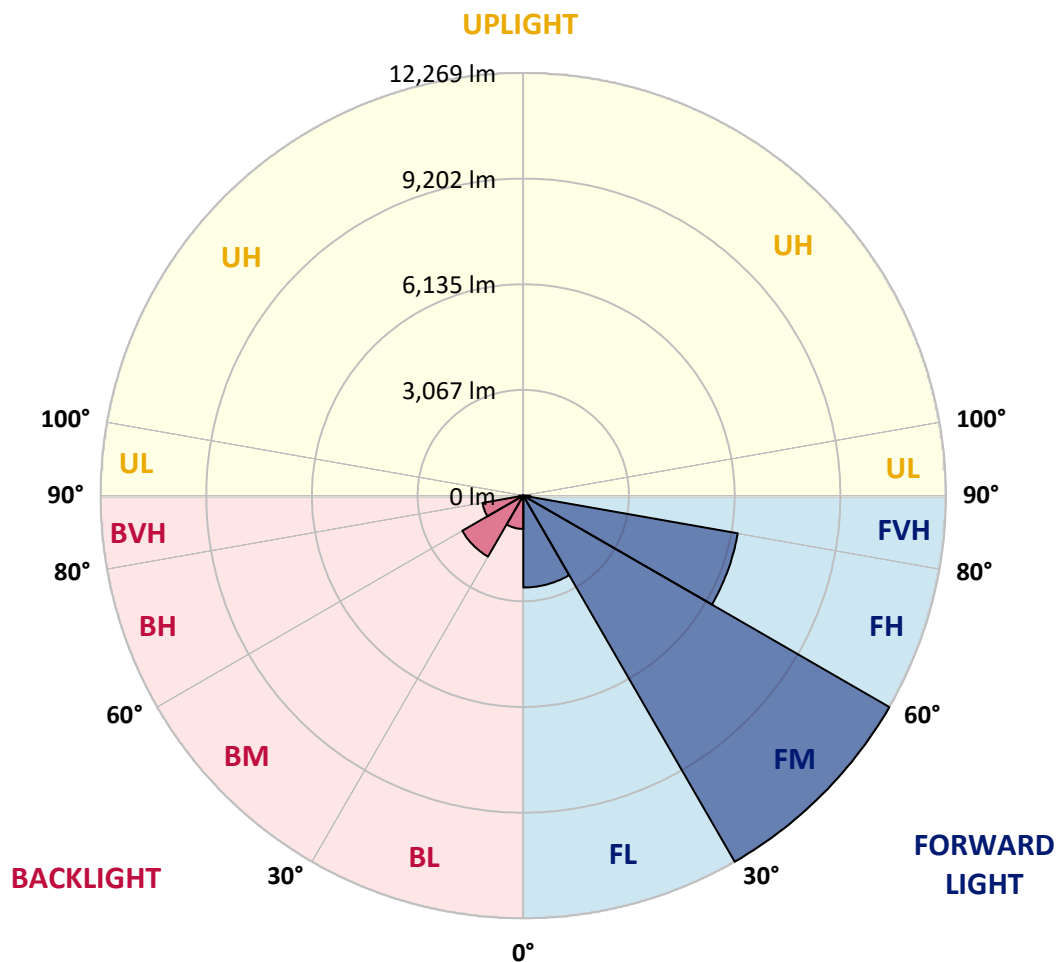
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2666.9  | 10.3      |                         |      |         |
| FM   | (30°-60°)   | 12269.1 | 47.6      |                         |      |         |
| FH   | (60°-80°)   | 6321.2  | 24.5      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 202.2   | 0.8       |                         |      | G2/225  |
| BL   | (0°-30°)    | 968.1   | 3.8       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 2044.7  | 7.9       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1202.5  | 4.7       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 121.3   | 0.5       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 76°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2396.8  | 2396.8  | 2396.8  | 2396.8  | 2396.8  | 2396.8  | 2396.8  | 2396.8  | 2396.8  | 2396.8  | 2396.8  |
| 2.5°  | 3184.5  | 3163.5  | 3141.1  | 3079.6  | 3013.8  | 2939.7  | 2833.3  | 2731.2  | 2595.5  | 2591.3  | 2490.5  |
| 5°    | 4067.4  | 4053.4  | 3954.0  | 3896.7  | 3744.2  | 3541.3  | 3369.2  | 3102.0  | 2854.3  | 2824.9  | 2629.0  |
| 7.5°  | 4878.9  | 4824.3  | 4786.6  | 4683.0  | 4531.9  | 4271.7  | 3938.7  | 3577.7  | 3163.5  | 3124.3  | 2799.7  |
| 10°   | 5490.3  | 5484.7  | 5465.1  | 5375.6  | 5262.3  | 5003.4  | 4634.0  | 4116.4  | 3555.3  | 3478.3  | 3006.8  |
| 12.5° | 5947.9  | 5952.1  | 5949.3  | 5947.9  | 5866.7  | 5647.0  | 5246.9  | 4701.2  | 3951.2  | 3896.7  | 3246.1  |
| 15°   | 6248.7  | 6290.7  | 6307.4  | 6377.4  | 6384.4  | 6237.5  | 5893.3  | 5266.5  | 4397.6  | 4316.4  | 3503.5  |
| 17.5° | 6447.4  | 6468.4  | 6546.7  | 6665.6  | 6762.2  | 6735.6  | 6429.2  | 5789.8  | 4853.7  | 4718.0  | 3770.8  |
| 20°   | 6637.7  | 6674.0  | 6734.2  | 6896.5  | 7067.2  | 7145.5  | 6930.1  | 6325.6  | 5305.6  | 5218.9  | 4066.0  |
| 22.5° | 7033.6  | 7085.4  | 7106.4  | 7188.9  | 7334.4  | 7473.0  | 7375.0  | 6839.1  | 5800.9  | 5683.4  | 4379.4  |
| 25°   | 7703.8  | 7758.4  | 7699.6  | 7680.0  | 7727.6  | 7796.2  | 7775.2  | 7323.2  | 6268.3  | 6100.4  | 4676.0  |
| 27.5° | 8576.9  | 8583.9  | 8469.2  | 8360.0  | 8242.5  | 8207.5  | 8143.2  | 7752.8  | 6674.0  | 6534.1  | 4974.0  |
| 30°   | 9514.3  | 9480.8  | 9290.5  | 9093.2  | 8894.5  | 8698.6  | 8513.9  | 8166.9  | 7126.0  | 6965.1  | 5266.5  |
| 32.5° | 10384.6 | 10366.4 | 10155.2 | 9848.7  | 9512.9  | 9328.3  | 8954.7  | 8585.3  | 7610.1  | 7454.8  | 5567.3  |
| 35°   | 11036.6 | 11063.2 | 10831.0 | 10496.6 | 10130.0 | 9966.3  | 9494.8  | 9024.6  | 8111.0  | 7941.7  | 5894.7  |
| 37.5° | 11499.8 | 11485.8 | 11280.1 | 10990.5 | 10668.7 | 10525.9 | 10125.8 | 9504.5  | 8649.7  | 8487.4  | 6252.9  |
| 40°   | 11664.9 | 11656.5 | 11504.0 | 11292.7 | 11088.4 | 11038.0 | 10786.2 | 10022.2 | 9266.7  | 9076.4  | 6683.8  |
| 42.5° | 11559.9 | 11578.1 | 11477.4 | 11420.0 | 11382.2 | 11418.6 | 11442.4 | 10700.8 | 9939.7  | 9764.8  | 7151.1  |
| 45°   | 11238.1 | 11228.3 | 11214.3 | 11308.1 | 11520.7 | 11760.0 | 12091.6 | 11341.7 | 10671.5 | 10531.5 | 7778.0  |
| 47.5° | 10663.1 | 10733.0 | 10768.0 | 11026.8 | 11491.4 | 12058.0 | 12838.8 | 12200.7 | 11733.4 | 11611.7 | 8733.6  |
| 50°   | 9858.5  | 9914.5  | 10121.6 | 10581.9 | 11274.5 | 12170.0 | 13569.1 | 13605.5 | 13504.8 | 13276.7 | 9771.8  |
| 52.5° | 8602.1  | 8688.8  | 9115.6  | 9959.3  | 10829.6 | 12123.8 | 14011.3 | 14810.2 | 14943.1 | 14772.4 | 10794.6 |
| 55°   | 7195.9  | 7317.6  | 7768.2  | 8874.9  | 10216.7 | 11871.9 | 14316.3 | 15508.4 | 16038.7 | 15880.6 | 11779.6 |
| 57.5° | 5819.1  | 5947.9  | 6411.0  | 7482.7  | 9147.8  | 11315.1 | 14516.4 | 16286.3 | 17530.2 | 17324.5 | 13005.3 |
| 60°   | 4361.2  | 4495.5  | 4892.9  | 5996.8  | 7625.5  | 10226.5 | 14380.6 | 16960.7 | 19020.3 | 18932.1 | 14232.3 |
| 62.5° | 2813.7  | 2962.0  | 3307.6  | 4221.3  | 5861.1  | 8739.2  | 13654.5 | 17332.9 | 20310.3 | 20204.0 | 15127.8 |
| 65°   | 1714.0  | 1730.8  | 1921.1  | 2620.6  | 4011.4  | 6766.4  | 11993.7 | 16839.0 | 20990.3 | 20958.1 | 15400.6 |
| 67.5° | 1108.1  | 1134.7  | 1221.5  | 1569.9  | 2405.2  | 4699.8  | 9589.9  | 15209.0 | 20592.9 | 20581.8 | 14836.8 |
| 70°   | 936.0   | 944.4   | 983.6   | 1059.2  | 1397.8  | 2850.1  | 6734.2  | 12610.7 | 19083.2 | 19083.2 | 13481.0 |
| 72.5° | 836.7   | 847.9   | 861.9   | 885.7   | 997.6   | 1614.6  | 4018.4  | 9816.6  | 16476.6 | 16585.7 | 11474.6 |
| 75°   | 759.7   | 756.9   | 765.3   | 769.5   | 850.7   | 1055.0  | 2077.8  | 7260.3  | 12746.4 | 12528.1 | 8309.7  |
| 77.5° | 650.6   | 654.8   | 650.6   | 668.8   | 751.4   | 803.1   | 1055.0  | 4871.9  | 7724.8  | 7442.2  | 4170.9  |
| 80°   | 534.5   | 541.5   | 548.5   | 559.7   | 642.2   | 610.0   | 633.8   | 2220.5  | 2857.1  | 2796.9  | 1288.6  |
| 82.5° | 401.6   | 411.4   | 422.5   | 449.1   | 505.1   | 403.0   | 400.2   | 948.6   | 1031.2  | 944.4   | 474.3   |
| 85°   | 162.3   | 191.7   | 289.6   | 316.2   | 317.6   | 221.1   | 246.3   | 396.0   | 421.1   | 411.4   | 186.1   |
| 87.5° | 37.8    | 44.8    | 93.7    | 141.3   | 130.1   | 82.6    | 90.9    | 128.7   | 146.9   | 135.7   | 63.0    |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |



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**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2396.8 | 2396.8 | 2396.8 | 2396.8 | 2396.8 | 2396.8 | 2396.8 | 2396.8 | 2396.8 | 2396.8 | 2396.8 |
| 2.5°  | 2444.3 | 2395.4 | 2311.4 | 2247.1 | 2200.9 | 2160.3 | 2135.1 | 2119.7 | 2114.1 | 2112.7 | 2114.1 |
| 5°    | 2526.9 | 2440.1 | 2307.2 | 2223.3 | 2177.1 | 2150.5 | 2135.1 | 2133.7 | 2135.1 | 2136.5 | 2132.3 |
| 7.5°  | 2640.2 | 2515.7 | 2342.2 | 2263.9 | 2228.9 | 2209.3 | 2202.3 | 2199.5 | 2200.9 | 2199.5 | 2199.5 |
| 10°   | 2791.3 | 2620.6 | 2410.8 | 2329.6 | 2300.2 | 2277.8 | 2266.7 | 2259.7 | 2254.1 | 2248.5 | 2245.7 |
| 12.5° | 2957.8 | 2736.8 | 2484.9 | 2406.6 | 2364.6 | 2329.6 | 2304.4 | 2286.2 | 2273.6 | 2261.1 | 2258.3 |
| 15°   | 3143.9 | 2859.9 | 2567.5 | 2458.3 | 2398.2 | 2346.4 | 2303.0 | 2273.6 | 2251.3 | 2233.1 | 2231.7 |
| 17.5° | 3321.6 | 2976.0 | 2623.4 | 2482.1 | 2394.0 | 2321.2 | 2263.9 | 2223.3 | 2195.3 | 2171.5 | 2168.7 |
| 20°   | 3511.9 | 3086.6 | 2648.6 | 2466.7 | 2352.0 | 2263.9 | 2188.3 | 2139.3 | 2107.1 | 2080.6 | 2076.4 |
| 22.5° | 3703.6 | 3180.3 | 2645.8 | 2417.8 | 2279.2 | 2175.7 | 2096.0 | 2044.2 | 2006.4 | 1979.8 | 1970.0 |
| 25°   | 3886.9 | 3255.9 | 2610.8 | 2339.4 | 2178.5 | 2070.8 | 1989.6 | 1942.0 | 1908.5 | 1876.3 | 1876.3 |
| 27.5° | 4052.0 | 3300.6 | 2545.1 | 2244.3 | 2075.0 | 1961.6 | 1897.3 | 1853.9 | 1823.1 | 1802.1 | 1789.5 |
| 30°   | 4214.3 | 3321.6 | 2455.5 | 2123.9 | 1965.8 | 1869.3 | 1817.5 | 1792.3 | 1764.4 | 1740.6 | 1737.8 |
| 32.5° | 4359.8 | 3317.4 | 2343.6 | 2006.4 | 1862.3 | 1793.7 | 1772.7 | 1753.2 | 1723.8 | 1690.2 | 1681.8 |
| 35°   | 4501.1 | 3289.4 | 2210.7 | 1877.7 | 1775.5 | 1749.0 | 1754.6 | 1726.6 | 1673.4 | 1631.4 | 1624.4 |
| 37.5° | 4655.0 | 3239.1 | 2065.2 | 1772.7 | 1702.8 | 1728.0 | 1742.0 | 1680.4 | 1593.7 | 1527.9 | 1512.5 |
| 40°   | 4832.7 | 3181.7 | 1914.1 | 1667.8 | 1645.4 | 1708.4 | 1708.4 | 1595.1 | 1476.1 | 1435.5 | 1424.4 |
| 42.5° | 5041.2 | 3134.1 | 1788.1 | 1579.7 | 1597.8 | 1660.8 | 1653.8 | 1481.7 | 1432.7 | 1411.8 | 1406.2 |
| 45°   | 5371.4 | 3117.3 | 1658.0 | 1502.7 | 1558.7 | 1604.8 | 1547.5 | 1442.5 | 1414.6 | 1397.8 | 1392.2 |
| 47.5° | 5893.3 | 3136.9 | 1543.3 | 1445.3 | 1513.9 | 1548.9 | 1428.6 | 1416.0 | 1396.4 | 1372.6 | 1369.8 |
| 50°   | 6377.4 | 3118.7 | 1462.1 | 1413.2 | 1474.7 | 1481.7 | 1379.6 | 1383.8 | 1372.6 | 1346.0 | 1340.4 |
| 52.5° | 6773.4 | 3061.4 | 1410.4 | 1396.4 | 1441.1 | 1364.2 | 1333.4 | 1348.8 | 1344.6 | 1311.0 | 1305.4 |
| 55°   | 7208.5 | 3026.4 | 1385.2 | 1396.4 | 1418.8 | 1262.0 | 1290.0 | 1312.4 | 1306.8 | 1283.0 | 1281.6 |
| 57.5° | 7736.0 | 3033.4 | 1367.0 | 1400.6 | 1396.4 | 1210.3 | 1246.7 | 1273.2 | 1271.8 | 1264.8 | 1264.8 |
| 60°   | 8276.1 | 3036.2 | 1339.0 | 1399.2 | 1369.8 | 1169.7 | 1201.9 | 1239.7 | 1242.5 | 1246.7 | 1246.7 |
| 62.5° | 8455.2 | 2914.5 | 1284.4 | 1374.0 | 1311.0 | 1130.5 | 1159.9 | 1211.7 | 1208.9 | 1220.1 | 1221.5 |
| 65°   | 8120.8 | 2577.3 | 1203.3 | 1316.6 | 1235.5 | 1102.5 | 1127.7 | 1175.3 | 1159.9 | 1189.3 | 1194.9 |
| 67.5° | 7391.8 | 2132.3 | 1077.4 | 1213.1 | 1151.5 | 1073.2 | 1106.7 | 1124.9 | 1096.9 | 1154.3 | 1155.7 |
| 70°   | 6388.6 | 1665.0 | 917.9  | 1066.2 | 1056.4 | 1042.4 | 1090.0 | 1062.0 | 1022.8 | 1092.7 | 1078.8 |
| 72.5° | 5342.0 | 1271.8 | 733.2  | 871.7  | 929.0  | 996.2  | 1060.6 | 980.8  | 926.2  | 947.2  | 922.1  |
| 75°   | 4012.8 | 940.2  | 589.0  | 682.8  | 773.7  | 930.4  | 1034.0 | 882.9  | 798.9  | 779.3  | 773.7  |
| 77.5° | 2045.6 | 614.2  | 440.7  | 510.7  | 580.7  | 840.9  | 997.6  | 768.1  | 661.8  | 631.0  | 617.0  |
| 80°   | 730.4  | 382.0  | 310.6  | 352.6  | 391.8  | 723.4  | 871.7  | 635.2  | 513.5  | 507.9  | 513.5  |
| 82.5° | 338.6  | 246.3  | 208.5  | 230.9  | 232.3  | 482.7  | 664.6  | 474.3  | 390.4  | 593.2  | 500.9  |
| 85°   | 145.5  | 123.1  | 117.5  | 114.7  | 106.3  | 215.5  | 373.6  | 254.6  | 397.4  | 177.7  | 163.7  |
| 87.5° | 43.4   | 49.0   | 43.4   | 32.2   | 23.8   | 23.8   | 37.8   | 14.0   | 9.8    | 7.0    | 7.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)